

ABSTRACT OF THE DISCLOSURE

The present invention provides a method for purifying bacterial minicells that involves subjecting a sample containing minicells to density gradient centrifugation in a biologically compatible medium. The method optionally includes a preliminary differential centrifugation step and one or more filtration steps. The invention also provides a method for purifying bacterial minicells in which a sample containing minicells is subjected to a condition that induces parent bacterial cells to adopt a filamentous form, followed by filtration of the sample to separate minicells from parent bacterial cells. The inventive methods optionally include one or more steps to remove endotoxin from purified minicell preparations, and/or treatment of purified minicell preparations with an antibiotic. Additionally, the invention provides purified minicell preparations, prepared according to the foregoing methods, and containing fewer than about 1 contaminating parent bacterial cell per 10^7 , 10^8 , 10^9 , 10^{10} , or 10^{11} minicells.